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25 YEAR RE-REVIEW

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1. The international "Q" code was used for all radio communication by SOVROMTRANSPORT (SRT) ships on the high seas, in home and foreign ports, and on the Danube. When on the high seas, ships maintained all contacts required by international law as well as contact with Constanta (call sign: YPE), the home port station. In the event of an emergency, such as a collision of SRT ships at sea, Bucharest (call sign: YPD) was contacted and then instructed the ships involved through Constanta.

2. When ships were in home ports, all communication was handled by the SRT office at the port. In foreign ports, ships listened to Constanta station (YPE), with particular attention paid to the 2200 hours GMT broadcast when cables regarding ships' business was sent.

3. Barges on the Danube communicated with Bucharest YPD during the day, with Bucharest station YPD3 during the night and also with SRT agencies located in the various Danube harbors. Seagoing vessels on the Danube maintained contact with Constanta YPE and with Danube SRT agencies. 25X1 occasionally the radio room of Rumanian ships was sealed on entering the Danube at Sulina (N 45-10, E 29-41).

4. SRT ships never communicated with Rumanian naval vessels, border guard units, or Soviet stations.

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5. Radio communication was under the authority of the Ministry of Telecommunications, however, SOVROMTRANSPORT was directed by the Soviets who often disregarded the Ministry's regulations and used frequencies that were prohibited.

6. On SRT vessels, only the ships' captains could give permission for coded messages to be transmitted. Copies of all messages sent on a voyage were kept by the ship's captain, who, on arrival at the home port, had to account to the authorities for all messages sent during the voyage. 25X1

one of the radio operators on the TRANSILVANIA in 1950-51 in touch with security forces and of sending messages clandestinely.

Coastal Stations

7. Bucharest had four SRT coastal stations:

a. Station YPD which communicated with coastal stations from 0700 until 1900 hours using a frequency of 6,300 kc. in spring and summer and 4,448 kc. in fall and winter. It also communicated with Danube tugboats at 1000, 1200, 1400, and 1730 hours GMT for ships' positions.

b. Station YPD2 communicated with Danube tugboats and worked a 24-hour day. During the day, it worked with other coastal stations using a frequency of 4,760 kc.

c. Another YPD station was operated twice a day by the radio inspector of the SOVROMTRANSPORT Radio Section who communicated in Russian with Odessa, USSR, and Budapest. This station was also used as an emergency station for communication in Rumanian with SRT ships.

d. A fourth station was a reserve station, used to replace any of the above in the event that one broke down.

(1) The four transmitters were Redifon short wave coastal transmitters, maritime radio sets with a power output of 800 w. Their frequencies were 4,760 kc. All transmitters were located on the first floor of the smaller of the two SOVROMTRANSPORT buildings on Povernei Street in Bucharest. The office of the radio director and a storeroom for spare parts were located on the same floor. A radio repair workshop was located on the second floor. 25X1

(2) The four receivers were located on Vissarion Street approximately 200 m. from the transmitters. Receivers and transmitters were separated by this distance to avoid interference. The receivers were installed on special Redifon receiver desks each with two receivers; one was a Redifon-50 and the other to use for emergencies. These desks also had necessary power supplies for the receivers, remote control for the transmitters, and transmitter keys.

(3) Power supply for receivers and transmitters came from a 120 v. AC main supply. Two BC-610 generators, located in a garage under the transmitter room, were kept for emergency purposes.

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(4) Four operators worked for YPD and two for YPD2. When YPD closed down at 1900 hours, YPD2 serviced all low-priority radiograms that accumulated during the day and kept watch for tugboats during the night.

8. Constanta station, YPE, communicated at night with ships at sea and with Bucharest YPD3, another call sign Bucharest used for coastal agencies and tugboats, on a frequency of 4,760 kc. During the day, in spring and summer from 0700 to 1900 hours GMT, YPE communicated with Bucharest YPD on a frequency of about 4,750 kc. and with ships at sea on approximately 6,300 kc. When the latter frequency failed, the station used 8 or 12 meg. bands. In fall and winter YPD was contacted on 4,730 kc. Three operators worked at the station to maintain 24-hour service. Ships were contacted at 0600, 0900, 1500 (1800 was optional), and 2200 hours GMT for ship position radiograms and for calling CP instead of CQ each hour. Service was also maintained with YPD Bucharest every 30 minutes past the hour except when engaged in communication with ships. This station was located in the SRT building on the second floor in the center of the building. In the same building, there were offices for the harbor master, customs, INFLOT, the Soviet maritime agency, and a Soviet radio station, UOIQ, which communicated in Russian with Soviet ships and coastal stations such as Odessa, USSR, and Stalin (formerly Varna), Bulgaria.

a. Constanta had two transmitters which had been constructed by SRT radio technicians. The main transmitter, 600-700 w., used the BC-610 tuning units for oscilator, doublers, and final tank. The tubes, the same as those used for the BC-610 generator, were only for radio frequencies and not radio telephony. The second transmitter used 6L6 and 807 tubes, had a power output of 500 w., and had a frequency of 3,000 to 6,000 kc.

b. The receivers were a Redifon-50 and an Eddystone, 25X1
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c. Power supply came from a main line constructed especially for the station in 1953. Power was 220 AC for both receivers and transmitters.

d. Rectifier units for transmitters were located on the third floor over the radio room. Because the port of Constanta used DC current, plans were made in 1953 to install an electric generator for the transmitters and the vibrators of the receivers for emergency use.

9. Galati station, YPF, communicated with YPD (Bucharest), YPG (Braila), and with tugboats when in the vicinity. Until 1952, both the transmitter and receiver were located in the SRT building in Galati, but in 1952-53, the transmitter was replaced by a more powerful model BC-610; it was installed 25X1
in the same location because SRT always preferred to have their 25X1
radio rooms as close as possible to their buildings. This station operated at fixed hours from 0700 to 1900 hours and had two radio operators. the BC-610 transmitter had a power 25X1
output of 500 w. and used frequencies of 4,760, 3,870, 3,044, and 5,717 kcs.

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10. Braila station, YPG, communicated with YPD (Bucharest) and YPF (Galati) as well as with tugboats when in the vicinity. The station, located in the SRT building, operated from 0700 to 1900 hours.

a. The transmitter was an old, German aircraft-type, FUG-10 shortwave with modified power supply, antenna tuning, and a connection box. It had a power output of 75 w. and used a frequency of from 3,000 to 6,000 kc. It had three tubes, type RV-12-P35, one oscilator, and two finals connected in parallel.

b. The receiver, a FUG-10, had a frequency range of 3,000 to 6,000 kc.; it had 11 tubes, all type RV-12-P-2000.

c. Both the receiver and the transmitter were connected with a German power supply box that delivered + 750 v., -200 v., and 24 v. for the transmitter and + 220v. and 24 v. for the receiver.

d. The station had one operator who worked at fixed hours during the day only.

11. Giurgiu (N 43-53, E 25-57) station, YPO, communicated with YPD (Bucharest) and with tugboats in the vicinity from 0700 to 1900 hours with one operator. The station was located in the SRT building and operated on a frequency of 6,250 to 6,350 kc.

a. The transmitter, a Soviet military shortwave, type RSB, had a power output of 75 w. and was equipped with two directly-heated filament tubes (Soviet type) and a GU-4 oscilator.

b. The antenna tuning system consisted of a variometer included in the transmitter. Frequency was 2.5 to 12 meg.

c. The receiver was a Soviet military set, type "US" (cyrillic "УС"). Frequency covered was 12 meg. to about 100 kc. The receiver was a superheterodyne with eight tubes: three 6K7 (one for radio frequency and two for medium frequency), one 6L7 (mixer), three 6J7 (beat frequency oscilator, radio frequency oscilator, and final), and one 6H6. The receiver required 24 v. filament and 220 v. for anode. Medium frequency was 125 kc. Signal-to-noise ratio and image rejection was poor. There were five frequency bands and four controls: volume, automatic volume control, frequency, and beat frequency oscilator.

d. Power supply was obtained from a 26 v. battery which supplied current for the transmitter and receiver filament and a dynamotor. High tension for the transmitter was supplied by a home-made rectifier which delivered 750 v. and 1,250 v. from the main supply.

12. Turnu-Severin (N 44-38, E 22-40) station, YPI, communicated with YPD (Bucharest), YPT (Orsova), YPH (Moldova-Veche), all tugboats in the vicinity, and with Vienna. The station was located in the SRT building and had a power output of 500 w. [redacted] 25X1 there was a BC-610 transmitter and a BC-342 receiver. Power came from the main supply. Two operators worked at fixed hours from 0700 to 1900 hours on a frequency of 6,250 to 6,350 kc.

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13. Orsova (N 44-43, E 22-25), YPT, communicated with YPD (Bucharest), YPI (Turnu-Severin), tugboats in the vicinity, and possibly with YPH (Moldova Veche). YPT was located in the SRT building. [redacted] the transmitter and receiver were German FUG-10s, the same as those at YPG (Braila). Power supply was the same as that at Braila. The Orsova station had one operator who worked from 0700 to 1900 hours. Frequencies used were 4,760, 3,870, 3,044, and 5,717 kcs. Power output was 60 w. This station was small and had been constructed in 1951 or 1952. 25X1

14. Moldova-Veche (N 44-43, E 21-39), YPH, communicated with YPD (Bucharest), YPI (Turnu-Severin), YPT (Orsova), and with tugboats in the vicinity. The station was located in the SRT building on the Danube. [redacted] it was to be moved into a radio operator's house in the central part of town. The transmitter was a Soviet RSB with a corresponding YC (cyrillic) receiver. The entire station was battery-powered with batteries charged by means of a gasoline generator; it had one operator who worked from 0700 to 1900 hours on a frequency of 6,250 to 6,350 kc. 25X1

Ship Stations

15. Ships' stations communicated with international coastal stations, SRT offices, and YPE (Constanta). All SRT ships' stations used frequencies of 3,000, 4,125, 4,140, 5,555, 6,187.5, 6,210, 8,250, 8,280, 12,375, 12,420, 16,500, and 16,560 kc. with the exception of the TRANSILVANIA, ARDEAL, and BEREZINA who were unable to use 3,000 and 5,555 because their frequencies were fixed.

16. The TRANSILVANIA, ARDEAL, and BEREZINA were equipped with IMRC (International Marine Radio Corporation) radio sets. The ARDEAL and BEREZINA had two radio operators each and the TRANSILVANIA three. Their call signs were:

YQSE - TRANSILVANIA
YQSA - ARDEAL
YQSJ - BEREZINA

a. Transmitters - medium wave: 400 w. power output and fixed frequencies of 375, 400, 410, 425, 454, 468, 484, and 500 kc.

Transmitters - short wave: 300 w. output with fixed frequency bands (marine only) crystal-controlled. Bands were 4,6,8,12,16, 22, and 25 meg. Only A1 (continuous wave) transmission was used.

b. Receivers: IMRC-42 Universal which was also used for emergencies on the TRANSILVANIA and ARDEAL. Other equipment included a crystal-controlled Eddystone-640 on the TRANSILVANIA and ARDEAL. The BEREZINA used a Redifon-50 and a battery-powered emergency receiver.

c. Auto-oscilators: Battery-powered with a power output of 50 w. on all three ships.

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d. Direction finders: IMRC model on all three ships.

e. Automatic alarm receivers: IMRC model on TRANSILVANIA and ARDEAL only. Type unknown on BEREZINA.

17. The PLEHANOV and FRIEDRICH ENGELS had two radio operators each. Both ships were equipped with US Mackay sets. Their call signs were:

YQSF - PLEHANOV
YQSD - FRIEDRICH ENGELS

a. Transmitters - medium wave: Model 155-B with a power output of 300 w. on both ships.

Transmitters - short wave: Model 167 with a power output of 150-200 w. on both ships.

b. Receivers: Scott SLRF medium and short wave. Emergency receiver was an RCA model, battery-powered (for filament) and BC-312 power pack for high tension.

c. Direction finders: A Redifon on the PLEHANOV, a Mackay on the FRIEDRICH ENGELS.

d. There was no automatic alarm receiver on either ship.

18. The DIMITROV had two radio operators. Its call sign was: YQSC.

a. Transmitter - medium wave: An IMRC with 400 w. power output and fixed frequencies of 375, 400, 410, 425, 454, 468, 484, and 500 kc.

Transmitter - short wave: An old Mackay model with an output of 200 w. The emergency transmitter was an unknown Soviet type.

b. Receivers: Medium wave was an IMRC-42 and a Redifon-50. The emergency receiver was an RCA model, battery-powered (for filament) with a BC-312 power pack for high tension.

c. There was no automatic alarm receiver.

19. The MANGALIA and the CONSTANTA had Hungarian Philips radio sets mounted on a panel. Each ship had one radio operator. Call signs were:

YQSG - MANGALIA
YQSB - CONSTANTA

a. Transmitters - medium wave: Unknown type with a power output of 125 w. with both fixed and variable frequencies. Transmitters were equipped with five German RL-12-P-35 tubes (one oscilator tube, one buffer, and three tubes in final stage connected in parallel).

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Transmitters - short wave: Unknown type with a power output of 100 w., fixed marine bands, crystal-controlled frequencies, and continuous variable frequencies from 2.5 to 16 meg. These transmitters used the same German-made tubes as those of the medium wave transmitters.
Both medium and short wave transmitters used A1, A2 (modulated continuous wave), and A3 (telephone) transmission and were powered by a dynamotor from the ships' main source.

b. Receivers - medium wave: Unknown model with a frequency range of 100 kc. to 2 meg. with four tubes regenerative receiver which used three tubes, type 1T4, for radio frequency stages and one DLL-101 for the final stage.

Receivers - short wave: Unknown seven-tube superheterodynes which used four types of tubes: 1T4, 1H5, 1S5, and DLL-101 for final stages. Frequency coverage was from 2.5 to 16 meg. Both receivers were calibrated in meters and powered by 1.5 v. filament batteries and 90 v. high tension batteries.

c. Direction finders: An unknown model which used four fixed cross-antennas instead of a loop.

d. There was no automatic alarm receiver on either ship.

20. The SULINA and the MIDIA both used the same radio equipment. Each ship had one radio operator. Call signs were:

YQSI - SULINA
YQSH - MIDIA

a. Transmitters - medium and short wave: Soviet SRKS with a power output of 100 w. Emergency transmitters were IMRC models with 50 w. output.

b. Receivers - medium and short wave: Soviet type "US" (cyrillic "YC") which corresponded to the SRKS transmitters. Emergency receivers were IMRC's.

c. Direction finders: Redifon (the same model as that on the PLEHANOV but with a small loop.)

d. There were no automatic alarm receivers on either ship.

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Tugboat Stations

21. Tugboat stations transmitted only to Bucharest YPD and YPD2 and used frequencies of 4,448 and 5,313 kc. in fall and winter. In spring and summer they operated on frequencies of 3,875 and 5,540 kc. Occasionally they used an 8 meg. band with 8,330 kc. and a 3 meg. band with 3,020 kc. Below are listed Danube tugboat stations, the call sign for each, and the type of radio set used when known. (Note: Those preceded with an asterisk (*) are tugboats on which Source has worked.)

Name of Tugboat	Call Sign	Type of Radio
*ALBA IULIA	YPBA	Soviet RSB
MIRON COSTIN	YPBB	"
ASTRAHAN	YPBC	"
*ARHANGELSK	YPBD	"
*DECEBAL	YPBE	German FUG-10
*SOVROM	YPBF	Soviet SRKS
*SMOLENSK	YPBH	Soviet RSB
PECS	YPBI	"
TALLIN	YPBJ	"
CARPATI	YPBK	unknown
KERCI	YPBM	Soviet RSB
CLOSCA	YPBN	unknown
OITUZ	YPBP	"
ARAD	YPBQ	"
IASI	YPBT	"
SEVERIN	YPBV	"
CRAIOVA	YPBX	"
TIMISOARA	YPBY	"
NOVOROSISK	YPBZ	Soviet RSB
ABRUD	YPAB	unknown
CARAIMAN	YPAD	"
BUCHAREST	YPAG	"
BELOIANIS	YPAH	"

[redacted] existance of tugboat station with the call signs: YPBG, YPBL, and YPBO [redacted] YPBR, YPBS, YPBU, and YPBW were assigned to tugs built since 1950.

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22. YPBE (DECEBAL) was equipped with a German aircraft FUG-10 radio set which had a modified antenna-tuning system, power supply, and a connection box like that used by coastal stations YPG (Braila) and YPT (Orsova). A special dynamotor delivered alternating current from the DECEBAL's main direct current supply.

23. Tugboat station YPBF (SOVROM) had a Soviet SRKS transmitter though all others used the Soviet RSB. The only difference between the SRKS and the RSB was that the SRKS had an output of 100 w. and had both medium and short wave. Its tubes were types, 6L6, 6N7, and a Soviet indirectly-heated cathode tube similar in characteristic and appearance to the US type, 813. The entire set was battery-powered with the batteries charged through a dropping resistor from the ship's main source.

24. Other tugboats, including the newer ones, used the Soviet RSB which was like that used by coastal station YPH (Moldova-Veche) with the exception of the battery-charging system. Some used resistors to drop the main voltage to 30 v., direct current, while others used a dynamotor, to deliver 30 v. direct current from the ship's main source.